

Claims

- [c1] 1. A method of fabricating a precision circuit element comprising:
creating one or more redundant circuit elements;
creating one or more trim circuit elements;
creating one or more links coupling said redundant circuit elements to said trim circuit elements;
selectively activating one or more of said links to achieve a desired capacitance.
- [c2] 2. The method of claim 1 where said links are fusible links and said activating comprises blowing of said fusible links.
- [c3] 3. The method of claim 1 where said links are antifuses and said activating comprises fusing of said antifuses.
- [c4] 4. A method of fabricating a precision capacitor comprising:
creating one or more redundant plates;
creating one or more trim plates;
creating one or more links coupling said redundant plates to said trim plates;
creating a common plate capacitively coupled to said re-

dundant plates and said trim plates; and
selectively activating one or more of said links to achieve
a desired capacitance.

[c5] 5. The method of claim 4 where said links are fusible
links and said activating comprises blowing of said
fusible links.

[c6] 6. The method of claim 4 where said links are antifuses
and said activating comprises fusing of said antifuses.

[c7] 7. A method of fabricating a precision capacitor com-
prising:
creating a capacitor having a first plate and a second
plate, said first plate capacitively coupled to said second
plate;
creating a plurality of trim capacitors each having a first
trim plate and a second trim plate said first trim plate
capacitively coupled to said second trim plate;
connecting, in series, said capacitor and said trim capac-
itors;
connecting one or more links in parallel with each of said
trim capacitors; and
selectively activating said one or more of said links to
achieve a desired capacitance.

[c8] 8. The method of claim 7 where said links are fusible

links and said activating comprises blowing of said fusible links.

[c9] 9. The method of claim 7 where said links are antifuses and said activating comprises fusing of said antifuses.

[c10] 10. A method of forming a capacitor comprising:
depositing a first insulator film;
etching a first trough;
depositing a first liner within said first trough;
depositing a first conductive electrode within said trough;
polishing off excess material;
depositing a second insulator film over said first conductive electrode;
etching a second trough extending through said second insulator film extending to said first copper electrode;
cleaning surfaces;
applying a thin dielectric over said exposed first copper electrode;
depositing a second liner;
depositing a second copper electrode; and
polishing off excess material.

[c11] 11. The method of claim 10 wherein said applying is depositing a thin dielectric.

[c12] 12. The method of claim 10 wherein said applying is growing a thin dielectric.